

What is claimed is:

1. A crosslinkable, expandable polymeric composition comprising:
 - (a) a free-radical crosslinkable polymer;
 - (b) a low temperature free-radical inducing species;
 - (c) a crosslinking-profile modifier; and
 - (d) a blowing agent.
2. The crosslinkable, expandable polymeric composition of Claim 1 wherein the blowing agent being selected from the group consisting of chemical blowing agents and physical blowing agents.
3. The crosslinkable, expandable polymeric composition of Claim 1 wherein the blowing agent being a chemical blowing agent having its activation temperature within the nominal crosslinking temperature profile.
4. The crosslinkable, expandable polymeric composition of Claim 1 wherein the crosslinking profile modifier being present in an amount sufficient to permit uniform heating of the crosslinkable, expandable polymeric composition when heated.
5. The crosslinkable, expandable polymeric composition of Claim 1 wherein the crosslinking profile modifier permits achieving a cure rate at least as fast as achievable in the absence of the crosslinking profile modifier.
6. The crosslinkable, expandable polymeric composition of Claim 1 wherein the free-radical inducing species being present in an amount sufficient to achieve a crosslinking density at least as high as achievable in the absence of the crosslinking-profile modifier.
7. The crosslinkable, expandable polymeric composition of Claim 1 further comprising a cure booster being present in an amount sufficient to achieve a crosslinking density at least as high as achievable in the absence of the crosslinking-profile modifier.

8. A crosslinked, expanded article of manufacture prepared from the crosslinkable, expandable polymeric composition of Claim 1.

9. The crosslinked, expanded article of manufacture of Claim 8 wherein the size of the foamed cells being substantially uniform.

10. The crosslinked, expanded article of manufacture of Claim 8 wherein the crosslinking being substantially uniform.

11. A crosslinkable, expandable polymeric composition comprising:

- (a) a free-radical crosslinkable polymer;
- (b) a short-half-life free-radical inducing species;
- (c) a crosslinking-profile modifier; and
- (d) a blowing agent.

12. An improved process for preparing a crosslinked, expanded article of manufacture comprising the steps of

- (i) melt processing a crosslinkable, expandable polymeric composition comprising
 - (1) a free-radical crosslinkable polymer,
 - (2) a low temperature free-radical inducing species,
 - (3) a blowing agent, and
 - (4) a crosslinking-profile modifier;
- (ii) molding the crosslinkable, expandable polymeric composition into the shape of the article of manufacture; and
- (iii) crosslinking and expanding the crosslinkable, expandable polymeric composition as a formed article of manufacture.

13. The improved process of Claim 12 wherein the crosslinking profile modifier being present in an amount sufficient to permit uniform heating of the crosslinkable, expandable polymeric composition during the molding step.

14. An improved process for preparing a crosslinked, expanded article of manufacture comprising the steps of

- (i) melt processing a crosslinkable, expandable polymeric composition comprising
 - (1) a free-radical crosslinkable polymer,
 - (2) a short-half-life free-radical inducing species,
 - (3) a blowing agent, and
 - (4) a crosslinking-profile modifier;
- (ii) molding the crosslinkable, expandable polymeric composition into the shape of the article of manufacture; and
- (iii) crosslinking and expanding the crosslinkable, expandable polymeric composition as a formed article of manufacture.

15. The improved process of any of Claims 12 - 14 for preparing a crosslinked, expanded article of manufacture wherein melt processing occurs at a temperature greater than the nominal melt processing temperature.

16. The improved process of any of Claims 12 - 15 for preparing a crosslinked, expanded article of manufacture wherein molding occurs at a temperature greater than the nominal molding temperature.

17. The improved process of any of Claims 12 - 16 wherein the process running at least about 20 percent faster than the nominal processing rate.

18. A crosslinked, expanded article of manufacture prepared according to the process of any of Claims 12 - 17.

19. The crosslinked, expanded article of manufacture according to Claim 18 wherein the article being a shoe sole.

20. The crosslinked, expanded article of manufacture according to Claim 19 wherein the article being a multicomponent shoe sole.